

Land West of Brook Lane and South of A259, Rustington **Land Engineering Works Statement**

Site access

The main entrance to the new development is from the existing A259 to the north boundary of the site. A deceleration lane for entry and an acceleration lane for exit will be constructed as part of the works. The level of the A259 on the centreline of the new access road will set the access level into the development.

The new access road falls from the A259 down to a new mini roundabout. The level of the centre of the roundabout will be determined at detailed design stage and will be set to comply with the maximum permitted gradient (or less if levels allow) from the Department of Transport guidelines for the new access from the A259.

Road and Building levels

From the new roundabout the access road will cross the existing stream at a level set to suit those recommended in the Flood Risk Assessment. This level will be set to allow the access road to remain out of the flood plain so that safe access and egress can be provided to the site in the event of a flooding event. Once the stream has been crossed the road will rise again to suit the new site levels for the development.

The floor levels and external parking and garden areas to the new houses and the Care Home will all be set to be above the design flood event level agreed with the Environment Agency with a suitable freeboard as recommended by the EA. The freeboard (ie finished floor level) is likely to be between 300mm and 600mm above the design flooding levels and is yet to be agreed with the EA noting the sensitivity of the site and the buildings on it. The final Flood Risk Assessment will determine these levels and these will be followed at detailed design stage.

The road crossing the stream will be raised as noted above to be clear of the flood levels and an earth embankment will be constructed to support the road over this area. If the soil on the site is suitable then where possible the embankment will be constructed using materials gained from other parts of the site, using a soil stabilisation technique if necessary. This was used on the recent retail development a few hundred metres to the east of this site and saved a considerable amount of excavated material from having to be taken off site to landfill and importation of replacement material. Naturally this considerably reduced the amount of lorries having to travel to and from site.

The levels of the amenity space alongside the stream will be set to allow flooding to occur in this zone such that no flood water that is currently stored on the site is displaced downstream. The volume of flood compensation storage has been calculated and will be provided in this area. Any clean and suitable soil excavated from this area will be retained on site and used to landscape the space to the west of the development where the new pond is to be located.

Earthworks

For all development areas the site will first be stripped of any topsoil which will either be stored for reuse or excess material transported off site to an approved land disposal site. Where the buildings or roads are being cut into the existing levels this will be removed and reused on site as fill material wherever possible or taken off site if not suitable.

Wherever possible making up of levels will be carried out using suitable materials won from the site. Where necessary clean uncontaminated material will be imported to site to make up levels where insufficient site won material is available.

Third Party Approvals

The Environment Agency will be consulted with respect to land engineering works and appropriate certificates obtained for all imported materials and excess materials leaving the site. Waste Acceptance Criteria testing will be carried out on any materials to be disposed of from the site so that the composition can be determined and submitted to the proposed landfill site(s) prior to disposal commencing. Appropriate certificates will be made available for submission to the Environment Agency.

Any imported materials will be validated to confirm acceptability and Duty of Care and Haulage Certification will be provided by the haulage contractors clearly detailing the source and delivery address for the imported materials. The imported soils will be tested to ensure concentrations of potential contaminants are not above acceptable guidance levels.